



[4910-13-P]

**DEPARTMENT OF TRANSPORTATION**

**Federal Aviation Administration**

**14 CFR Part 39**

**[Docket No. FAA-2011-0562; Directorate Identifier 2011-CE-015-AD]**

**RIN 2120-AA64**

**Airworthiness Directives; Cessna Aircraft Company Airplanes; Initial Regulatory Flexibility Analysis**

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Availability of an Initial Regulatory Flexibility Analysis

**SUMMARY:** This document announces the availability of and request for comments on the Initial Regulatory Flexibility Analysis for the previously published proposed airworthiness directive (AD) on Cessna Aircraft Company 310, 320, 340, 401, 402, 411, 414, and 421 airplanes regarding the installation of placards requiring flight limitations in icing conditions.

**DATES:** Comments must be received on or before [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

- Federal eRulemaking Portal: Go to <http://www.regulations.gov>. Follow the instructions for submitting comments.
- Fax: 202-493-2251.
- Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.

- Hand Delivery: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

**FOR FURTHER INFORMATION CONTACT:** Jason Brys, Flight Test Engineer, FAA, Wichita Aircraft Certification Office, 1801 S. Airport Road, Room 100, Wichita, Kansas 67209; telephone: (316) 946-4100; fax: (316) 946-4107; email: jason.brys@faa.gov.

## **SUPPLEMENTARY INFORMATION:**

### **Discussion**

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to include an AD that would apply to the specified products. That NPRM published in the Federal Register on June 3, 2011 (76 FR 32103). That NPRM proposed to require you to install a placard that prohibits flight into known icing conditions and install a placard that increases published speed on approach 17 miles per hour (mph) (15 knots) in case of an inadvertent encounter with icing.

### **Reason for this Action**

The Regulatory Flexibility Act of 1980 (Public Law 96-354) (RFA) establishes as a principle of regulatory issuance that agencies shall endeavor, consistent with the objective of the rule and of applicable statutes, to fit regulatory and informational requirements to the scale of the businesses, organizations, and governmental jurisdictions subject to regulation.

To achieve that principle, the RFA requires agencies to solicit and consider flexible regulatory proposals and to explain the rationale for their actions. The RFA covers a wide-range of small entities, including small businesses, not-for-profit organizations, and small governmental jurisdictions.

Agencies must perform a review to determine whether a proposed or final rule will have a significant economic impact on a substantial number of small entities. In accordance with Section 608 of the Regulatory Flexibility Act, an agency head may waive or delay completion of some or all of the requirements of Section 603 by providing a written finding that this final rule is being promulgated in response to an emergency that makes compliance or timely compliance with the provisions of Section 603 impracticable.

Based on the comments received following publication of the NPRM, we have re-evaluated our certification under the RFA that the proposed rule will not, if promulgated, have a significant impact on a substantial number of small entities. Based on our re-evaluation, we have determined that the proposed rule will, if promulgated, have a significant impact on a substantial number of small entities. Consequently, we have completed an initial regulatory flexibility analysis (IRFA) and request comments from affected small entities. The purpose of this analysis is to identify the number of small entities affected, assess the economic impact of the proposed regulation on them, and consider less burdensome alternatives and still meet the agency's statutory objectives. Section 603(a) of the RFA requires that each initial regulatory flexibility analysis contain:

1. A description of the reasons action by the agency is being considered;
2. A succinct statement of the objectives of, and legal basis for, the proposed rule;
3. A description of and, where feasible, an estimate of the number of small entities to which the proposed rule will apply;
4. A description of the projected reporting, recordkeeping, and other compliance requirements of the proposed rule, including an estimate of the classes of small entities that will be subject to the requirement and the type of professional skills necessary for preparation of the report or record;

5. To the extent practicable, an identification of all relevant Federal rules that may duplicate, overlap, or conflict with the proposed rule; and
6. A description of any significant alternatives to the proposed rule that accomplish the stated objectives of applicable statutes and that minimize any significant economic impact of the proposed rule on small entities.

A brief description of each of these criteria is discussed below. A full discussion, footnote references, tables, and appendix included in the full IRFA can be found in the docket at <http://www.regulations.gov/#!searchResults;rpp=25;po=0;s=FAA-2011-0562>.

#### 1. A Description of the Reasons Action by the Agency Is Being Considered

For the airplanes listed in Cessna Aircraft Company (Cessna) Service Bulletin MEB97-4, the actions required by the proposed rule will prohibit flight into known icing conditions. An investigation of the airplanes affected by the proposed rule showed 52 icing-related incidents and accidents over the last 30 years resulting in 36 fatalities. The non-fatal accidents have usually resulted in injuries and substantial aircraft damage.

Although many of these airplanes are equipped with optional deicing boots and other deicing (or icing prevention) equipment, the manufacturer never intended that they should be flown into known icing. However, the original certification basis for these airplanes did not incorporate Amendment 7 (May 3, 1962) of CAR 3, requiring manufacturers to provide a placard specifying the types of operations and meteorological conditions (e.g. icing conditions) to which the operation of the aircraft is limited by the equipment installed (CAR 3 § 3.772). As a result, with operational deicing equipment these airplanes may be qualified to fly into known light or moderate icing condition under 14 CFR § 135.227(c)(1) and may even be allowed to fly into known icing conditions under 14 CFR 91.9. In 1973, new part 23 certification rules became effective. Some of the later production of the affected Cessna models added new and improved equipment in order to recertify under the new requirements. However, production under previous type certificates continued as late as 1976.

## 2. Objectives of, and Legal Basis for, the Proposed Rule

The proposed rule would require owners or operators to install a placard prohibiting flight into known icing conditions. With the limited deicing equipment of the affected airplanes, flight into known icing conditions could result in unusual flight characteristics leading to loss of control with consequent accidents. The proposed rule would also require owners or operators to install a second placard that increases published speed on approach by 17 mph (15 knots) in case of an inadvertent encounter with icing. Many of the Cessna accidents were the result of high sink speeds, which may have been related to icing, resulting in hard landings. Failure to mandate an increased published speed may result in continuing occurrences of this unusual flight characteristic with consequent accidents.

Title 49 of the U.S. Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII, Aviation Programs, describes in more detail the scope of the FAA's authority.

We are issuing this rulemaking under the authority described in subtitle VII, part A, subpart III, section 44701, "General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on the airplanes identified in the NPRM.

## 3. A Description of and an Estimate of the Number of Small Entities to which the Proposed Rule Will Apply

The airplanes affected by the proposed AD are the 4,206 U.S.-registered Cessna twin-engine airplanes with certain serial numbers among Models 310, 320, 340, 401, 402, 411, 414, and 421 specified in Cessna Service Bulletin MEB97-4.

To obtain information on small entities affected by the AD, we emailed a questionnaire directly to seven firms with the largest number of airplanes listed in Cessna Service Bulletin MEB97-4 and received responses from six of these firms—the Small Sample. Separately, the Aircraft Owners and Pilots Association (AOPA) conducted an online survey and received 198 responses from owners with affected airplanes. This sample was reduced to 104 entities—the Large Sample--by eliminating 94 responses from individuals who used their airplanes for personal use only.

Employment size in the Small Sample ranges from 6 to 48, with a median of 16.75. For the Large Sample 84 out of 104 respondents reported employment size, ranging from 1 to 1,000, with a median of 6. Since, as noted, personal use appears to account for about half of the airplanes listed in Cessna Service Bulletin MEB97-4, we estimate the number of small entity airplanes affected by the AD to be half of 1,608, or 804.

As to type of operations, the Large Sample indicates only if the owner's airplane(s) are for "Corporate" or "Charter" use. All of the firms in the Small Sample engage in part 135 operations of one kind or another—on demand air charter, cargo and/or passenger, or scheduled freight. The Small Business Administration (SBA) classifies part 135 operations into NAICS industries 481111, Scheduled Passenger Air Transportation; 481112, Scheduled Freight Air Transportation, 481211, Nonscheduled Passenger Air Transportation; and 481212, Nonscheduled Freight Air Transportation.

For all of these industries, the SBA maximum small business size is 1,500 employees. All of the entities in both samples are well below 1,500 employees. Accordingly, we conclude that the proposed rule would affect a substantial number of small entities.

#### 4. Reporting, Record Keeping, and Other Compliance Requirements of the Proposed Rule

Small entities will incur no new reporting and record-keeping requirements as a result of this rule.

An Initial Regulatory Flexibility Analysis was not undertaken prior to issuance of the NPRM (76 FR 32105), June 3, 2011, as the FAA initially determined that the cost of the proposed rule was minimal, being just the cost of placard installation. However, as a result of comments to the NPRM docket, it became apparent to the FAA that there may be significant additional costs for the subset of the affected airplanes with optional deicing equipment. Several commenters to the NPRM docket argue that affected airplanes with deicing equipment can be safely operated in light or moderate icing conditions. They further argue that to be prohibited from doing so would severely restrict their operations and impose significant costs.

As a result of these comments, we surveyed Cessna Twin operators and independently estimated the cost on operators by the proposed prohibition on flight into known icing. We approximated this cost by estimating the cost to operators of substituting airplanes certificated for flight into known icing for their current airplanes. In response to a request from the FAA, Cessna undertook a sample survey and estimated that 38.23 percent of the airplanes listed in Cessna Service Bulletin MEB97-4 were equipped with deicing boots. Most of these airplanes also have deicing propellers. Applying that percentage to our airplane count of 4,206, we obtain an estimate of 1,608 AD-affected airplanes whose operators would be affected by the prohibition on flight into known icing, half of which, 804, are entities (commercial operators).

Our estimate per airplane of the present value cost of the proposed rule is \$60,277, with an annualized cost estimate to be \$8,582. The IRFA provides further cost information, which can be found in the docket.

#### 5. Duplicative, Overlapping or Conflicting Federal Rules

The FAA is unaware of any Federal rules that duplicate, overlap, or conflict with this proposed rule.

#### 6. Significant Alternatives to the Proposed Rule

Owing to the existing unsafe conditions, however, there is no feasible significant alternative to prohibiting the affected airplanes from flying into known icing conditions. And there is no significant alternative to mandating an increase in published speed on approach.

#### **Comments Invited**

We invite you to send any written relevant data, views, or arguments about this rulemaking. Send your comments to an address listed under the ADDRESSES section. Include “Docket No. FAA-2011-0562; Directorate Identifier 2011-CE-015-AD” at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this rulemaking action. The most helpful comments will reference a specific portion of the IRFA or related rulemaking document, explain the reason for any recommended change, and include supporting data.

We will post all comments we receive, without change, to <http://www.regulations.gov>, including any personal information you provide. We will address all comments in the final rule including those already in the docket from the NPRM. We will also post a report summarizing each substantive verbal contact we receive about this proposed AD.



Issued in Kansas City, Missouri, on September 24, 2012.

Earl Lawrence,  
Manager, Small Airplane Directorate,  
Aircraft Certification Service.

[FR Doc. 2012-24129 Filed 09/28/2012 at 8:45 am; Publication Date: 10/01/2012]